Application No.: 10/694,383

Reply to Office Action mailed on April 2, 2008

Page 2 of 6

## Amendments to the Claims:

This claim listing will replace all prior versions and listings of claims in the application: Claim Listing:

## 1-11. (Cancelled)

12. (Currently amended) An immunostimulatory oligonucleotide compound comprising a sequence of formula (*III*):

wherein:

Y is a non-natural pyrimidine nucleoside;

Z is guanosine, 2'-deoxy-guanosine or a non-natural purine nucleoside;

each X independently is a naturally occurring nucleoside or an immunostimulatory moiety;

wherein U*m*-U1 represents an upstream potentiation domain, where each U independently is a naturally occurring nucleoside or an immunostimulatory moiety;

wherein D1-Dm represents a downstream potentiation domain, where each D independently is a naturally occurring nucleoside or an immunostimulatory moiety; and m, at each occurrence, represents a number from 0 to 30; and

wherein the immunostimulatory moiety is selected from the group consisting of C3-alkyl linker, 2-aminobutyl-1,3-propanediol linker,  $\beta$ -L-deoxynucleoside, amino linker, nucleoside methylphosphonate, 2'-O-methyl-ribonucleoside, 1',2'-dideoxyribose, C3-linker, Spacer 18, 3'-deoxynucleoside, 2'-O-propargyl-ribonucleoside, Spacer 9 and 2'-5' linkage; and

wherein at least one X, U, or D is an immunostimulatory moiety.

## 13. (Canceled)

Application No.: 10/694,383

Reply to Office Action mailed on April 2, 2008

Page 3 of 6

14. (Currently amended) The immunostimulatory oligonucleotide compound of claim 12, wherein:

An immunostimulatory oligonucleotide compound comprising a sequence of formula (III):

wherein:

Y is a non-natural pyrimidine nucleoside;

Z is guanosine, 2'-deoxy-guanosine or a non-natural purine nucleoside;

X1 is a naturally occurring nucleoside or an immunostimulatory moiety selected from the group consisting of C3-alkyl linker, 2-aminobutyl-1,3-propanediol linker, and  $\beta$ -L-deoxynucleoside;

X2 is a naturally occurring nucleoside or an immunostimulatory moiety that is an amino linker;

X3 is a naturally occurring nucleoside or an immunostimulatory moiety that is a nucleoside methylphosphonate;

X4 is a naturally occurring nucleoside or an immunostimulatory moiety selected from the group consisting of a nucleoside methylphosphonate and 2' O methyl-ribonucleoside;

U1 is a naturally occurring nucleoside or an immunostimulatory moiety selected from the group consisting of 1',2'-dideoxyribose, C3-linker, and 2'-O-methyl-ribonucleoside;

U2 is a naturally occurring nucleoside or an immunostimulatory moiety selected from the group consisting of 1',2'-dideoxyribose, C3-linker, Spacer 18, 3'-deoxynucleoside, nucleoside methylphosphonate,  $\beta$ -L-deoxynucleoside, and 2'-O-propargyl-ribonucleoside;

U3 is a naturally occurring nucleoside or an immunostimulatory moiety selected from the group consisting of 1',2'-dideoxyribose, C3-linker, Spacer 9, Spacer 18, nucleoside methylphosphonate, and 2'-5' linkage;

Application No.: 10/694,383

Reply to Office Action mailed on April 2, 2008

Page 4 of 6

D1 is a naturally occurring nucleoside or an immunostimulatory moiety selected from the group consisting of 1',2'-dideoxyribose and nucleoside methylphosphonate;

D2 is a naturally occurring nucleoside or an immunostimulatory moiety selected from the group consisting of 1',2'-dideoxyribose, C3-linker, Spacer 9, Spacer 18, 2-aminobutyl-1,3-propanediol linker, nucleoside methylphosphonate, and β-L-deoxynucleoside; and

D3 is a naturally occurring nucleoside or an immunostimulatory moiety selected from the group consisting of 3'-deoxynucleoside, 2'-O-propargylribonucleoside; and 2'-5' linkage.

- 15. (Withdrawn) The immunostimulatory oligonucleotide compound of claim 12, wherein U2 and U3 are both the same immunostimulatory moiety selected from the group consisting of 1',2'-didoxyribose, C3-linker, or β-L-deoxynucleoside.
- 16. (Withdrawn) The immunostimulatory oligonucleotide compound of claim 12, wherein U3 and U4 are both the same immunostimulatory moiety selected from the group consisting of nucleoside methylphosphonate and 2'-O-methoxyethylribonucleoside.
- 17. (Withdrawn) The immunostimulatory oligonucleotide compound of claim 12, wherein U5 and U6 are both the same immunostimulatory moiety selected from the group consisting of 1',2'-dideoxyribose and C3-linker.
- 18. (Withdrawn) The immunostimulatory oligonucleotide compound of claim 12, wherein X1 and U3 are both 1',2'-dideoxyribose.
- 19. (Withdrawn) The immunostimulatory oligonucleotide compound of claim 12, wherein D2 and D3 are both the same immunostimulatory moiety selected from the group consisting of 1',2'-dideoxyribose and β-L-deoxynucleoside.

20-38. (Cancelled)